

**ALUMINUM NITRIDE AND ALUMINUM OXIDE/ALUMINUM NITRIDE  
HETEROSTRUCTURE GATE DIELECTRIC STACK BASED FIELD EFFECT  
TRANSISTORS AND METHOD FOR FORMING SAME**

**ABSTRACT OF THE DISCLOSURE**

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A structure (e.g., field effect transistor) and a method for making the structure, include a substrate having a source region, a drain region, and a channel region therebetween, an insulating layer disposed over the channel region, the insulating layer including a layer including aluminum nitride disposed over the channel region, and a gate electrode disposed over the insulating layer.